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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,420	11/28/2000	C. Bertil Stromberg	10-1322	4639

23117 7590 04/09/2003

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EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 04/09/2003

71

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/722,420

Applicant(s)

STROMBERG, C. BERTIL

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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The Final rejection of 5/30/2002 is withdrawn and the following action given:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 25 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 92/03609 or DEVIV (6,019,870).

The process steps of producing the product cannot be given probative weight in a product claim. WO 92/03609 teaches on pages 20 Example 50, bleaching a pulp with a DZED bleaching sequence to produce a pulp having a viscosity greater than 21 cp, e.g. 25.2 and having as brightness of 88.0 % GE. Applicant has not shown the claimed 89 ISO to be brighter than the 88.0 of WO 92/03609. It would have been obvious to the artisan to adjust the parameters to obtain a brighter pulp. See DEVIC Figure 8.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 92/03609 or TZAI (4,959,124) in view of NONNI.

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The process steps of producing the product cannot be given probative weight in a product claim. WO 92/03609 teaches on pages 20 Example 50, bleaching a pulp with a DZED bleaching sequence to produce a pulp having a viscosity greater than 21 cp, e.g. 25.2 and having as brightness of 88.0 % GE. TSAI teaches the same bleaching sequence as that used by Applicant (Examples 6-13) and teaches that the extraction stage could include an enhanced extraction stage using Eo, Ep or Eop (column 4, lines 40-44). If necessary, NONNI teaches that adding oxygen and either hypochlorite or peroxide to an extraction (E) stage without incurring viscosity losses. If the claimed pulp is brighter than the pulp of WO 92/03609 or TSAI, then it would have been obvious to use the oxygen and either hypochlorite or peroxide of NONNI in the extraction stage of WO 92/03609 to increase the brightness without lowering the viscosity, e.g. using the sequence DZEopD or DZEohD.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by TSAI.

TSAI teaches bleaching chemical (kraft) pulp in a (DZED) bleaching sequence and teaches that parenthesis around the bleach stage (column 5, lines 45-47) indicates that there is no washing between stages. Thus Examples 8, 9 and 11 do not define over the bleach sequence of the instant process.

Claim 1-3, 7, 8, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over TZAI as applied to claim 1 above, and further in view of AMBADY et al.

AMBADY et al teaches that there could be an extraction stage between the first chlorine dioxide stage and ozone stage, see column 4, lines 39-67. It would have been obvious to the artisan to include an additional E-stage between the first D and Z stage of TSAI as taught by AMBADY et al to remove chlorinated lignins. Note AMBADY et al, column 4, lines 66-67,

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teaches that symbols in parenthesis indicate an absence of washing stages. Thus, if necessary, the (DZED) stages of TSAI, which are in parenthesis, would not include intermediate wash stages. Claim 2, is rejected as obviously the extraction stage of TSAI would increase the pH of the pulp greater than 6.0 as such is taught by AMBADY, column 4, lines 24-33.

Claims 4-6, 9-12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over TSAI as applied to claim 1 above, and further in view of ADMITTED PRIOR ART (specification, page 2, lines 19-25).

The ADMITTED PRIOR ART teaches that soda/anthraquinone is a well-known chemical pulping process. It would have been obvious to one of ordinary skill in the art that the pulp of TSAI could have been prepared using any well-known process, such as the soda/AQ process of the ADMITTED PRIOR ART.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over TSAI in view of AMBADY et al and the ADMITTED PRIOR ART (specification, page 2, lines 19-25) as applied to claims 1 and 4 above, and further in view of SWEDISH APPLICATION 81020828 or NIMMERFROH et al.

SWEDISH APPLICATION 81020828 or NIMMERFROH et al teach using an N stage in combination with an alkaline stage lowers the kappa number and the water requirements, see SWEDISH APPLICATION 81020828 (16) or NIMMERFROH et al, translation, page 6, line 7. It would have been obvious to use an N-stage with the extraction stage of TSAI and/or AMBADY et al to lower the water requirements and the final kappa number as taught by SWEDISH APPLICATION 81020828 or NIMMERFROH et al.

Claims 17-22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over KOOI (4,619,733).

Kooi teaches soda anthraquinone pulping followed by one elemental free bleaching process (oxygen) followed by an oxidation agent (ozone) followed by peroxide bleaching. The sequence of KOOI does not differ from the claimed sequence. If necessary, it would have been obvious that any discoloration due to the chemical additive (AQ) would be removed by the ozone and/or peroxide as they are very strong oxidizing agents.

The arguments with respect to WO 92/03609 are not convincing. Claim 25 is drawn to a product. Applicant has argued that it is produced by different process steps. Applicant has not argued that the pulp is different from the pulp of WO 92/03609.

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Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **(703) 308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on 703-308-1164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **703-308-0661**.

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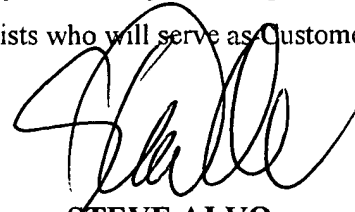
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MSA
4/6/03



STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731